Remarks

Claims 1-21 were pending. Claims 1-5 and 19-21 are cancelled without prejudice. Claims 22-27 are added. Therefore, claims 6-18 and 22-27 are now pending.

Support for the claim amendments and new claims can be found throughout the specification, for example:

Claims 6, 14 and 16: page 2, lines 20-23 and claim 19.

Claims 22-24: page 11, line 18 – page 14, line 9.

Claims 25 and 27: page 11, lines 21-24.

Claim 26: page 5, lines 19-25.

No new matter is introduced by this amendment.

35 U.S.C. § 112, second paragraph

Claims 1, 2, 6, 8, 10, 13, 14, 16 and 21 are rejected under 35 U.S.C. § 112, second paragraph, on the ground that the phrase "per serving" is indefinite. Applicants disagree and request reconsideration. It is asserted in the Office action that "per serving" is indefinite because what amount of NAG constitutes a serving is unclear. The term "serving" is clearly defined in the specification on page 8, lines 9-16. A serving is an amount a human or animal would customarily eat at one time. Therefore, the amount of food or beverage (for example a particular number of grams or mls) in a serving ("per serving") will depend on the particular food or beverage. However, the claims specify the minimum amount of NAG in each serving, and therefore, the amount of NAG in each serving is clear. For example, in claim 6, if the customary amount of a serving for a particular beverage is 12 ounces (355 ml, such as a can of soda), the amount of NAG in each 12 ounce serving (e.g. can of soda) would be at least about 0.01 g (10 mg). In claim 14, if the customary amount of a serving for a particular food product is 30 grams (such as a snack bar), the amount of NAG in each 30 g serving (e.g. snack bar) would be at least about 0.01 g (10 mg). Therefore, the term "per serving" is definite.

Claim 19 is rejected for reciting the phrase "wherein a second amount of NAG present in the NAG food product." Claim 19 is cancelled, making this rejection moot.

Therefore, Applicants request that the 35 U.S.C. § 112, second paragraph rejections be withdrawn.

35 U.S.C. § 102(b)/103(a)

Claims 1-5 and 20 are rejected under 35 U.S.C. § 102(b) as anticipated by, or in the alternative under 35 U.S.C. § 103(a) as obvious over, Troyano *et al.* (*J. Arg. Food Chem.* 44:815-7, 1996). Although Applicants disagree, claims 1-5 and 20 are cancelled, making this rejection moot. Therefore, Applicants request that this 35 U.S.C. § 102(b)/§ 103(a) rejection be withdrawn.

Claims 10-17, 19, and 21 are rejected under 35 U.S.C. § 102(b) as anticipated by, or in the alternative under 35 U.S.C. § 103(a) as obvious over, Matahira *et al.* (EP 1075836). Applicants disagree and request reconsideration. Claims 19 and 21 are cancelled, thereby making this rejection moot as to those claims.

Matahira *et al.* cannot negate the novelty of claims 10-17, as Matahira *et al.* do not provide any heating temperatures. As stated on page 5 of the Office action "Matahira *et al* silence with respect to temperature of the food product." A rejection under 35 U.S.C. § 102(b) requires that the reference recite every element of the claim. An element cannot be assumed or inferred by the reference. As Matahira *et al.* are silent on heating temperature, this reference cannot anticipate the claims.

Matahira *et al.* cannot negate the novelty or render obvious claims 10-13, as Matahira *et al.* do not provide or suggest food products without shellfish proteins. Claims 10-13 recite food products supplemented with NAG, which do not include shellfish proteins. Matahira *et al.* does not teach or suggest a food product that does not have shellfish proteins. The only NAG taught or suggested by Matahira *et al.* is NAG obtained from shells of crustacea (see paragraph [0014] of Matahira *et al.*). Therefore, addition of such NAG to a food product disclosed in Matahira *et al.* will result in shellfish proteins in the resulting NAG-containing food product. Therefore, claims 10-13 are novel and non-obvious in view of the Matahira *et al.* document. Similarly, new claim 26 is novel and non-obvious in view of Matahira *et al.*. Claim 26 specifies that the NAG is from fungal biomass, which is not taught or suggested by the Matahira *et al.* document.

Claims 14-17 are novel and non-obvious in view of the Matahira *et al.* document. Claim 14 now specifies an amount of NAG present in the food product after heating. Matahira *et al.* does not teach or suggest any amount of NAG that will be present after heating to at least 160°C. In contrast, the inventors unexpectedly determined that heating a food or beverage to which NAG was added does not substantially reduce the amount of active NAG present in the food or beverage (see Example 15 beginning on page 37). Similarly, new claim 27 is novel and non-obvious in view of Matahira *et al.*. Claim 27 specifies that at least 90% of the NAG added to the food product remains after heating. Because the method of making NAG food products is novel and non-obvious over the prior art cited, so too are claims to NAG food products produced by the method (new claim 24).

Therefore, the claims are novel and non-obvious in view of the Matahira *et al.* document, and Applicants request that this 35 U.S.C. § 102(b)/§ 103(a) rejection be withdrawn.

35 U.S.C. § 103(a)

Claims 6-9 are rejected under 35 U.S.C. § 103(a) as unpatentable over Matahira *et al.* (EP 1075836). Applicants disagree and request reconsideration.

Claim 6 now specifies an amount of NAG present in the beverage after pasteurization. Matahira *et al.* does not teach or suggest any amount of NAG that will be present after heat pasteurization, as Matahira *et al.* do not teach or suggest heat pasteurization. For example it might be expected that heating the NAG beverage to such temperatures might inactivate the NAG. In contrast, the inventors unexpectedly determined that heating a food or beverage to which NAG was added does not substantially reduce the amount of active NAG present in the food or beverage (see Example 15 beginning on page 37).

Similarly, new claim 25 is novel and non-obvious in view of Matahira *et al.*. Claim 25 specifies that at least 90% of the NAG added to the beverage remains after pasteurization.

Because the method of making NAG beverages is novel and non-obvious over the prior art cited, so too are claims to NAG beverages produced by the method (new claim 22).

Therefore, the claims are novel and non-obvious in view of the Matahira *et al.* document, and Applicants request that this 35 U.S.C. § 103(a) rejection be withdrawn.

Claim 18

No prior art was cited against claim 18, and thus is novel and non-obvious over the prior art. As discussed above, the term "per serving" is definite. Claim 18 has been amended to be an independent claim (and recites all of the limitations of original claim 6 from which it depended), and Applicants request that it be allowed. Claim 23 depends from allowable claim 18, and Applicants request that it also be allowed.

If any minor issues remain before a Notice of Allowance is issued, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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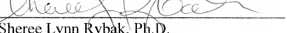
By 
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